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**P a t e n t   c l a i m s**

1. Method for heating a roller used in the production and/or finishing  
of a web of material, particularly a paper web or paperboard web,  
10 c h a r a c t e r i z e d   i n   t h a t  
the roller (12) is heated from the outside by a heated gas (14).
2. Method according to claim 1,  
c h a r a c t e r i z e d   i n   t h a t  
15 the fuel gas (14) is generated by means of at least one burner (18,  
38) arranged near the roller surface (16).
3. Method according to claim 2,  
c h a r a c t e r i z e d   i n   t h a t  
20 the fuel gas (14) emerging from the burner (18) acts on the surface  
(16) of the rotating roller.
4. Method according to one of the preceding claims,  
c h a r a c t e r i z e d   i n   t h a t  
25 the roller (12) is heatable on a zone basis viewed in the direction of  
the roller axis (X), with the various zones being heatable  
independently of each other at least in part.
5. Method according to one of the preceding claims,  
30 c h a r a c t e r i z e d   i n   t h a t

several burners (18) distributed over the length of the roller (12) are provided.

6. Method according to one of the preceding claims,  
5 characterized in that  
the burner used is a catalytic burner (18) by means of which the  
heat gas (14) is generated through combustion of a fuel (20) with air  
(22) or oxygen.
- 10 7. Method according to one of the preceding claims,  
characterized in that  
the burner (18) comprises a carrier (24) with catalytic coating.
8. Method according to one of the preceding claims,  
15 characterized in that  
a fuel gas is used as fuel (20).
9. Method according to one of the preceding claims,  
characterized in that  
20 the burner (18) is fed with an in particular adjustable fuel gas/air  
mixture.
10. Method according to claim 9,  
characterized in that  
25 the fuel (20) and air (22) are fed to a mixing element (26) installed  
upstream from the burner (18).
11. Method according to one of the preceding claims,  
characterized in that

the supplied air (22) is distributed by means of an air distributor (28) among several burners (18).

12. Method according to one of the preceding claims,  
5 characterized in that  
the reaction or roller temperature is adjusted or controlled by means  
of the fuel/air mass flow ratio.
13. Method according to one of the preceding claims,  
10 characterized in that  
the fuel gas mass flow is controlled.
14. Method according to one of the preceding claims,  
15 characterized in that  
the fuel gas concentration in the air is controlled.
15. Method according to one of the preceding claims,  
20 characterized in that  
the respective control is performed on a zone basis.
16. Method according to one of the preceding claims,  
characterized in that  
hydrogen or hydrogen-rich gas (reformat) is used as fuel.
- 25 17. Method according to one of the preceding claims,  
characterized in that  
natural gas is used as fuel.
18. Method according to one of the preceding claims,  
30 characterized in that

a respective burner (18) is arranged in an air-moving chamber (34) and the air flowing over the burner (18) is mixed with the burner waste gas.

- 5    19.    Method according to claim 18,  
         c h a r a c t e r i z e d   i n   t h a t  
         the air flowing over the burner (18) is mixed with the waste gas from  
         the burner (18) by means of a mixing element in the region of the  
         end of the air-moving chamber (34) facing the roller.
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20.    Method according to one of the preceding claims,  
         c h a r a c t e r i z e d   i n   t h a t  
         hot gas (40) generated by means of a burner (38) is mixed with  
         supplied cold air (46) in at least one mixing element (44) in order to  
15       generate the heat gas (14) for acting on the roller (12).
21.    Method according to claim 20,  
         c h a r a c t e r i z e d   i n   t h a t  
         the mass flow of the cold air fed to the mixing element (44) is  
20       adjustable or controllable.
22.    Method according to claim 20 or 21,  
         c h a r a c t e r i z e d   i n   t h a t  
         the burner (38) is fed with air (56) and fuel (54), in particular fuel  
25       gas.
23.    Method according to claim 22,  
         c h a r a c t e r i z e d   i n   t h a t  
         natural gas is used as fuel gas (54).
- 30

24. Method according to one of the claims 20 to 23,  
c h a r a c t e r i z e d in that  
the hot gas (40) generated by means of the burner (38) is distributed  
by means of a gas distributor (42) among several mixing elements  
5 (44) that are distributed over the length of the roller (12).
25. Method according to claim 24,  
c h a r a c t e r i z e d in that  
the mass flows of cold air fed to the various mixing elements (44) are  
10 separately adjustable or controllable at least in part.